

6JE6A

Beam Power Tube

NOVAR TYPE

SPECIAL PLATE STRUCTURE^a

For Color TV Horizontal-Deflection-Amplifier Applications

ELECTRICAL

Heater Characteristics and Ratings

Voltage (AC or DC)	6.3 ± 0.6	V
Current at 6.3 V	2.500	A
Maximum heater-cathode voltage		
Heater negative with respect to cathode:		
Peak	200	V
Heater positive with respect to cathode:		
Peak	200	V
DC component	100	V

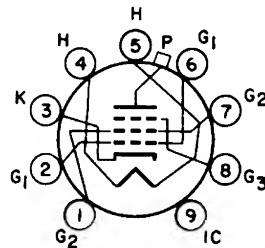
Direct Interelectrode Capacitances (Approx.)

Without external shield		
Grid No.1 to plate	0.56	pF
Input: G1 to (K, G3, G2, H)	22	pF
Output: P to (K, G3, G2, H)	11	pF

MECHANICAL

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	4.130 in
Seated Length	3.500 to 3.750 in
Diameter	1.438 to 1.562 in
Dimensional Outline (JEDEC No. 12-116)	See General Section
Bulb	T12
Cap.	Small (JEDEC No. C1-1)
Base	Large-Button Novar 9-Pin with Exhaust Tip (JEDEC No. E9-88)
Basing Designation for BOTTOM VIEW	.9QL

- Pin 1—Grid No.2
- Pin 2—Grid No.1
- Pin 3—Cathode
- Pin 4—Heater
- Pin 5—Heater
- Pin 6—Grid No.1
- Pin 7—Grid No.2
- Pin 8—Grid No.3
- Pin 9—Do Not Use
- Cap—Plate



CHARACTERISTICS

Plate Voltage.	-	55	175	-	60	175	V
Peak Positive-Pulse							
Plate Voltage ^b	5000	-	-	5000	-	-	V
Grid-No.3 Voltage.	+30	+30	+30	+30	+30	+30	V
Grid-No.2 Voltage.	125	125	125	145	145	145	V
Grid-No.1 Voltage.	-	0	-25	-	0	-35	V
Plate Resistance (Approx.)	-	-	5800	-	-	7000	Ω
Transconductance	-	-	9600	-	-	7500	μmhos



RADIO CORPORATION OF AMERICA
Electronic Components and Devices

Harrison, N. J.

DATA 1
9-65

6JE6A

Plate Current.	-	580 ^c	130	-	710 ^c	95	mA
Grid-No.2 Current. . .	-	40 ^c	2.8	-	55 ^c	2.4	mA
Grid-No.1 Voltage (Approx.) for plate mA = 1.	-120	-	-54	-125	-	-60	V
Triode Amplification Factor (Triode connection: grid No.2 connected to plate at socket).	-	-	3 ^d	-	-	2.8 ^e	

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values

For operation in a 525-line, 30-frame system

DC Plate Supply Voltage.	990	V
Peak Positive-Pulse Plate Voltage ^f	7500	V
Peak Negative-Pulse Plate Voltage.	1100	V
DC Grid-No.3 Voltage ^g	75	V
DC Grid-No.2 (Screen-Grid) Voltage	220	V
Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage	330	V
Cathode Current		
Peak	1200	mA
Average.	350	mA
Grid-No.2 Input.	5	W
Plate Dissipation ^h	30	W
Bulb Temperature	250	°C
At hottest point on bulb surface		

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance

For grid-resistor bias operation ^h	0.47	MΩ
For plate-pulsed operation.	10	MΩ
(Horizontal-deflection circuits only)		

^a Designed to minimize secondary-electron emission from plate and eliminate "knee" discontinuities in zero-bias region.

^b Under conditions shown in footnote^e.

^c This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

^d Plate volts = grid-No.2 volts = 125; grid No.3 connected to cathode at socket; grid-No.1 volts = -25.

^e Plate volts = grid-No.2 volts = 145; grid No.3 connected to cathode at socket; grid-No.1 volts = -35.

^f This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

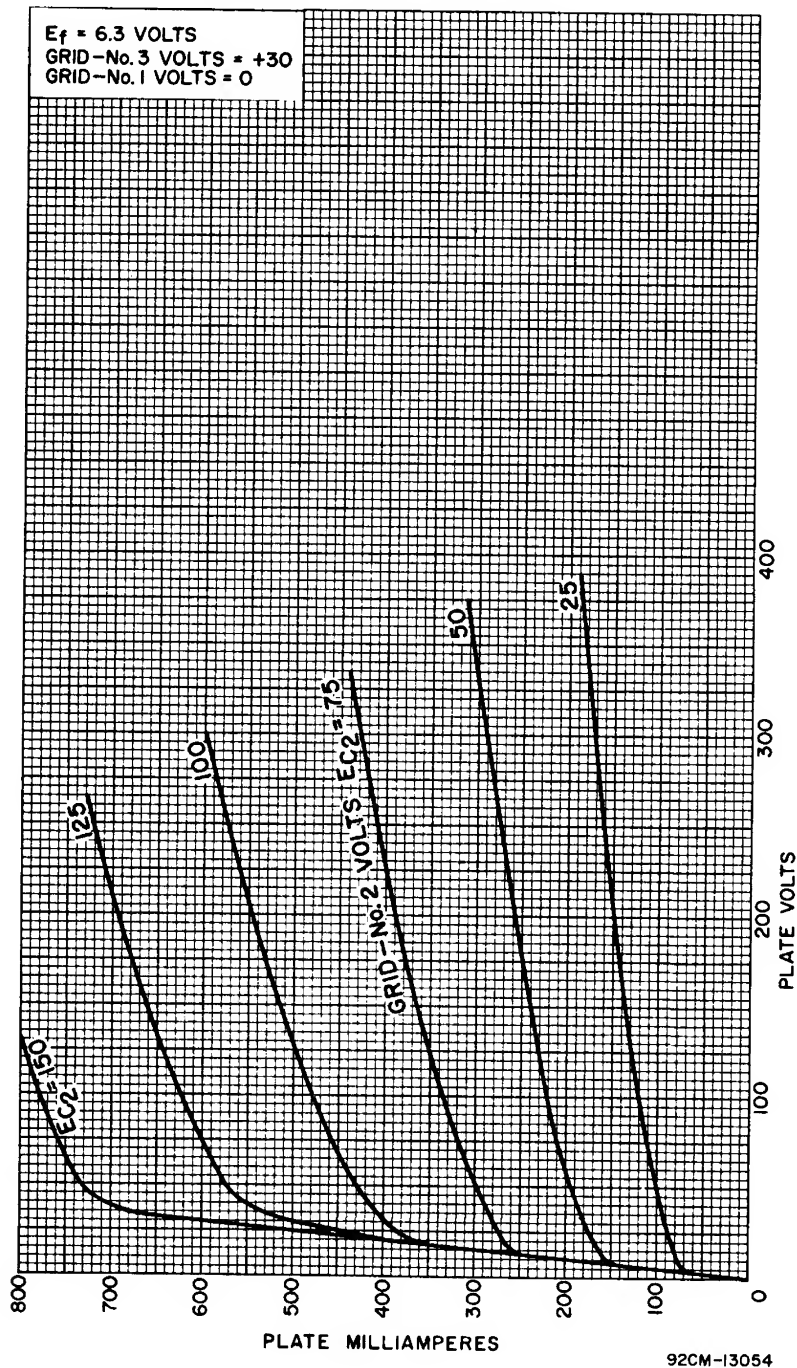
^g In horizontal-deflection-amplifier service, a positive voltage should be applied to grid No.3 to reduce interference from "snivets", which may occur in both vhf and uhf television receivers, and to increase power output. A typical value for this voltage is 30 volts.

^h An adequate bias resistor or other means is required to protect the tube in the absence of excitation.



6JE6A

Average Characteristics



RADIO CORPORATION OF AMERICA
 Electronic Components and Devices Harrison, N. J.

DATA 2
 9-65

6JE6A

Average Characteristics

